

ABSTRACT

The present invention relates to an acid-stabilized calcium carbonate slurry having a pH of less than 7, preferably between about 6 and about 7, containing water, calcium carbonate, 5 preferably precipitated calcium carbonate, and an acid-stabilizer of a water soluble calcium salt, a weak acid, a chelating agent, a weak acid capable of chelating calcium ion, or a mixture thereof. The acid-stabilizer is present in an amount sufficient 10 to provide an aqueous calcium carbonate slurry having an increased calcium ion concentration and an acidic pH. In a typical acid-stabilized calcium carbonate slurry of the invention, the acid-stabilizer is present in an amount sufficient to provide a calcium ion concentration of about 1 millimolar to about 5 molar, 15 preferably from about 1 to about 120 millimolar. The invention also relates to a method of making the acid-stabilized calcium carbonate slurry of the invention, to a method of forming a filled paper, that includes the step of adding the acid-stabilized calcium carbonate slurry of the invention to a papermaking pulp 20 in a process for making acid paper, and to a filled paper produced according to the method of the invention.

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